Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD0108 Reclamation District No. 0108 River	Overall LMA Rating	Total LMA Miles	* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA					
Farms	M *	20.92	Rating is M instead of A.					
		Maintena	nce Deficiancy		Enforc	ement	Design & System Obsolescence	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee						<u> </u>		<u> </u>
Encroachments	0.02		0.02	0.10%	0.37			
Animal Control	0.01	0.01	0.05	0.24%				
Crown Surface / Depressions / Rutting	1.28		1.28	6.12%				
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.07		0.07	0.34%				
DWR UCIP Field Study					0.08			
LMA Totals:	1.38	0.01	1.42	6.79% *	0.45	0.00	0.00	0.00
Unit No. 01 Colusa Basin Drain LB	Overall Unit Rating	Total Unit Miles						
RD0108	Α	20.64						
		Maintena	nce Deficiancy		Enforcement Design & System Obsolescence			
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee						<u> </u>		<u> </u>
Encroachments	0.02		0.02	0.10%	0.37			
Animal Control	0.01		0.01	0.05%				
Crown Surface / Depressions / Rutting	1.27		1.27	6.15%				
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.07		0.07	0.34%				
DWR UCIP Field Study					0.08			
Unit Totals:	1.37	0.00	1.37	6.64%	0.45	0.00	0.00	0.00
Unit No. 02 Castle Properties RB	Overall Unit Rating	Total Unit Miles						
RD0108	M	0.28						
					& System escence			
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Animal Control		0.01	0.04	14.32%				
Crown Surface / Depressions / Rutting	0.01		0.01	3.58%				
Unit Totals:	0.01	0.01	0.05	17.90%	0.00	0.00	0.00	0.00

LMA District Cover Sheet

Fall 2016 Levee Inspection Results

Reclamation District No. 0108 River Farms

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			M *	
	** Non-receipt of Summ Reports may effect o		* Overall LMA Threshold 10.00%; however, U Ri so the Overall LMA Ra	ated Miles are present,
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated		nined for the spring ins ria in the spring and in		ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			on and maintenance de nded to be an indiction o	
Comments				

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles
Unit No. 01 Colusa Basin Drain	Left	20.64

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/6/2016 - 4/6/2016		10/4/2016 - 10/4/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By			Gary Marler RD0108	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start		Rating **	Α	Issue No.		5		
LM End		Issue Type +	Ма	Location * N/A				
Category	GPS La	atitud	e/Longitude					
Calegory				Start		End		
Item		s & Maintena	nce		0		0	
пеш	Manuals				0		0	
DWR ID DWR_RD0108_01_s _ 2013_5								
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
RD 108 ha	RD 108 has O&M manuals.							

No Photos

LM Start		Rating **	Α	Issue No.		7			
LM End		Issue Type +	Location *	N/A					
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	Emergency Supplies &				٥		0		
item	Equipmen	it			٥		0		
DWR ID	DWR_RD0	108_01_s _ 201	3_7						
		Comn	nent Cod	de					
	Inspector Comment								
RD 108 ma	RD 108 maintains a stockpile of flood response materials.								

No Photos

	Rating **	Α	Issue No.		9		
	Issue Type +	Ма	Location *		N/A		
Earthen L	evee		GPS La	atituc	le/Longitude		
			Start		End		
Flood Pre	paredness &	Training		0		0	
				0		0	
DWR_RD0	108_01_s _ 201	3_9					
	Comn	nent Cod	le				
		_					
	Inspecto	or Comm	ent				
RD 108 has written response plans and regular flood response training.							
	Flood Pre	Issue Type + Earthen Levee Flood Preparedness & Tomm DWR_RD0108_01_s _ 201 Comm	Issue Type + Ma Earthen Levee Flood Preparedness & Training DWR_RD0108_01_s _ 2013_9 Comment Cod Inspector Comm	Issue Type + Ma Location * Earthen Levee GPS La Start Flood Preparedness & Training DWR_RD0108_01_s _ 2013_9 Comment Code Inspector Comment	Issue Type + Ma Location * Earthen Levee GPS Latitud Start Flood Preparedness & Training	Issue Type + Ma Location * N/A Earthen Levee	

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.06	Rating **	М	Issue No.		281
LM End	0.06	Issue Type +	En	Location *		N/A
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.82289)7°	38.822897 °
пеш				-121.79700	00°	-121.797000 °
DWR ID						·

Inspector Comment

Comment Code

FS_ID:37608 DS_ID:17943 EP_NO: 9396

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon.

FIELD_STRUCT_DESC: 1 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App. 9396-RD). O&M Manual SAC 132; October 1959

FS Date: 6/10/2014

LM Start	0.06	Rating **	М	Issue No.	281 (cont)
LM End	0.06	Issue Type +	En	Location *	N/A

Photo 1 of 2 : UCIP_FA_2016_37608_68207.jpg



View of concrete structure visible on waterward side.

Photo 2 of 2: UCIP_FA_2016_37608_68210.jpg



Dense vegetation on waterward side.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.06	Rating **	М	Issue No.		282		
LM End	0.06	Issue Type +	En	Location *	N/A			
Category				GPS Latitude/Longitude				
Category	<i>Jacegory</i>					End		
Item	DWR UCI	P Field Study		38.82291	9°	38.822919°		
пеш				-121.79704	6°	-121.797046°		
DWR ID	VR ID							
	Comment Code							

Inspector Comment

FS_ID:37609 DS_ID:22386 EP_NO: 9396

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon.

FIELD_STRUCT_DESC: 2 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App. 9396-RD). O&M Manual SAC 132; October 1959

FS Date: 6/10/2014

LM Start	0.06	Rating **	М	Issue No.	282 (cont)
LM End	0.06	Issue Type +	En	Location *	N/A

Photo 1 of 2: UCIP_FA_2016_37609_68211.jpg



Concrete structure located on waterward side.

Photo 2 of 2: UCIP_FA_2016_37609_68215.jpg



Dense vegetation covers the waterward slope.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.06	Rating **	М	Issue No.		283		
LM End	0.06	Issue Type +	En	Location *	N/A			
Category	Supplemental				GPS Latitude/Longitude			
Calegory		Start		End				
Item	DWR UCI	P Field Study		38.82293	3°	38.822933 °		
пеш				-121.79708	1 °	-121.797081 °		
DWR ID						·		

Comment Code

Inspector Comment

FS_ID:37610 DS_ID:22387 EP_NO: 9396

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon.

FIELD_STRUCT_DESC: 3 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App. 9396-RD). O&M

Manual SAC 132; October 1959 FS Date: 6/10/2014

LM Start	0.06	Rating **	М	Issue No.	283 (cont)
LM End	0.06	Issue Type +	En	Location *	N/A

Photo 1 of 2: UCIP_FA_2016_37610_68216.jpg



Concrete structure located on waterward side.

Photo 2 of 2: UCIP_FA_2016_37610_68219.jpg



Dense vegetation covers waterward side slope.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.06	Rating **	М	Issue No.		284			
LM End	0.06	Issue Type +	En	Location *		N/A			
Catagony	Category Supplemental				GPS Latitude/Longitude				
Calegory						End			
Item	DWR UCI	P Field Study		38.82289	7 °	38.822897	0		
пеш				-121.79700	0°	-121.797000	0		
DWR ID									

Inspector Comment

Comment Code

FS_ID:37611 DS_ID:22388 EP_NO: 9396

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon.

FIELD_STRUCT_DESC: 4 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App. 9396-RD). O&M Manual SAC 132; October 1959

FS Date: 6/10/2014

LM Start	0.06	Rating **	М	Issue No.	284 (cont)
LM End	0.06	Issue Type +	En	Location *	N/A

Photo 1 of 2 : UCIP_FA_2016_37611_68220.jpg



Concrete structure located on waterward side.

Photo 2 of 2: UCIP_FA_2016_37611_68224.jpg



Waterward slope covered by dense vegetation.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.07	Rating **	М	Issue No.		280		
LM End	0.07	Issue Type +	En	Location *		N/A		
Category				GPS Latitude/Longitude				
Calegory	tegory					End		
Item	DWR UCI	P Field Study		38.8229	54°	38.822954°		
пеш				-121.7971	35 °	-121.797135°		
DWR ID								
Comment Code								

Inspector Comment

FS_ID:37607 DS_ID:22389 EP_NO: 9396

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status of structure. Notes indicate crossing has been abandoned. Owner will need to coordinate with CVFPB and DWR inspector to determine how to properly abandon.

FIELD_STRUCT_DESC: 5 of 5. Five 72-inch abandoned pipes or culvert through levee 31.6 feet below crown. Slide gates on both ends. (App. 9736-RD 108) Ramp on landward slope. (App. 9396-RD). O&M Manual SAC 132; October 1959

FS Date: 6/10/2014

LM Start	0.07	Rating **	М	Issue No.	280 (cont)
LM End	0.07	Issue Type +	En	Location *	N/A

Photo 1 of 2: UCIP_FA_2016_37607_68203.jpg



Concrete structure located on waterward side.

Photo 2 of 2: UCIP_FA_2016_37607_68206.jpg



Waterward slope covered by dense vegetation.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	2.91	Rating **	М	Issue No.	286		
LM End	2.91	Issue Type +	En	Location *	N/A		
Supplemental				GPS Lat	ituc	le/Longitude	
Category	gory			Start		End	
Item	DWR UCI	P Field Study		38.83869	6°	38.838696°	
пеш				-121.84584	3°	-121.845843°	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:39707 DS_ID:24875 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: No signs of pipe visible--need to contact owner to obtain permit number authorizing work. If crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure.

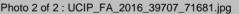
FIELD_STRUCT_DESC: Corrugated Metal (CM) pipe riser located on waterward side. Riser is filled with trash and deris. Unable to determine if crossing exists at this location.

FS Date: 3/18/2014

LM Start	2.91	Rating **	М	Issue No.	286 (cont)
LM End	2.91	Issue Type +	En	Location *	N/A



View of waterward side.





CMP riser located on waterward toe--2/3 filled with soil and trash.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	3.65	Rating **	М	Issue No.		23
LM End	3.65	Issue Type +	Ma	Location *		WS
LIVI ETIO			ivia			
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Catogory				Start		End
Item	Encroach	ments		38.8426	20°	38.842620°
item				-121.8587	'32 °	-121.858732°
DWR ID DWR_RD0108_01_f _ 2015_23						
		Comn	nent Cod	de		
DE : Debri	S					
		Inspecto	or Comm	nent		



View of the debris on the waterward side of the levee. Fall 2015.

LM Start	5.20	Rating **	A/W	Issue No.		10
LM End	5.20	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Vegetatio	า		38.8461	63°	38.846163°
пеш				-121.8869	974°	-121.886974°
DWR ID	DWR_RD0	108_01_s _ 201	4_10			
		Comn	nent Cod	le		
V7 : Trees	/ Woody \	egetation/				
		Inspecto	or Comm	ent		
Tree at the	toe is dyii	ng.				

LM Start	5.20	Rating **	A/W	Issue No.	10 (cont)
LM End	5.20	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2016_RD0108_203_10_20160913_00002.jpg

Tree limbs are along the toe of the levee. Tree is slowing dying and could be a hazard to the levee. Spring 2014

Photo 2 of 2: FA_2016_RD0108_203_10_20160913_00003.jpg



Tree limbs have been removed but suggest monitoring the dying tree. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	5.92	Rating **	M	Issue No.		17	
LM End	6.06	Issue Type +	Ма	Location *	CR		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		rface / Depres	ssions /	38.8522	30°	38.853967°	
item	Rutting			-121.8972	11 °	-121.898571 °	
DWR ID	DWR_RD0	108_01_s _ 201	6_17				
		Comn	nent Cod	le			
C2 : Repai	r depressi	ons or ruts in	the crow	n or slope.			
		Inchact	or Comm	ont			
		mspecii	or Comm	IEIIL			



View of the crown of the levee looking upstream. Spring 2016.

LM Start	8.27	Rating **	A/W	Issue No.	26		
LM End	8.27	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Cracking			38.8825	95°	38.882595	0
item				-121.9146	69°	-121.914669	0
DWR ID	ID DWR_RD0108_01_f _ 2015_26						
Comment Code							

CR1: Monitor and have inspected by geotechnical engineer.

Inspector Comment



View of the crack on the waterward side of the levee looking upstream. Suggest monitoring the crack. Fall 2015.

LM Start	8.98	Rating **	М	Issue No.		15
LM End	8.98	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		38.8929	12°	38.892912°
item				-121.9146	36°	-121.914636°
DWR ID	DWR_RD0	108_01_f _ 201	6_15			
		Comn	nent Cod	de		
GA : Garba	age					
		Inspecto	or Comm	nent		



Trash on waterward side on the levee. Fall 2016 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	9.29	Rating **	С	Issue No.		279	
LM End	9.29	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Slope Sta	bility		38.8974	52°	38.897452°	
пеш				-121.9146	80°	-121.914680 °	
DWR ID	DWR_RD0	DWR_RD0108_01_f _ 2013_279					
		Comn	nent Cod	de			
S1 : Repai	ir slope ins	tability.					
Inspector Comment							

No Photos

LM Start	9.66	Rating **	М	Issue No.		16	
LM End	9.66	Issue Type +	En	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Encroachments			38.9026	91 °	38.902691	0
пеш		-121.9146	45 °	-121.914645	0		
DWR ID	DWR_RD0						
Comment Code							

ST : Stairway

Inspector Comment

Department of Fish and Game staff is using stairway to access their monitoring site. Unable to verify permit.

Photo 1 of 1: FA_2016_RD0108_203_16_20161004_00041.jpg



View of a steel stairway on WS slope. Fall 2016 inspection.

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	11.20	Rating **	М	Issue No.		18	
LM End	11.20	Issue Type +	Ма	Location *	CR		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		rface / Depres	ssions /	38.9250	37°	38.925037 °	
item	Rutting				09°	-121.914509°	
DWR ID DWR_RD0108_01_s _ 2016_18							
		Comn	nent Cod	le			
C2 : Repa	ir depressi	ons or ruts in	the crow	n or slope.			
			0				
Inspector Comment							



View of the crown depression on the crown of the levee looking upstream. Spring 2016.

LM Start	11.24	Rating **	М	Issue No.		287	
LM End	11.24	Issue Type +	En	Location *		CR	
Category				GPS La	tituc	le/Longitude	
Calegory			Start		End		
Item	DWR UCI	P Field Study		38.92566	62°	38.925662°	
item				-121.91430)3 °	-121.914303°	
DWR ID							
Comment Code							

Inspector Comment

FS_ID:39717 DS_ID:24876 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to contact owner to determine additional details

of crossing.

FIELD_STRUCT_DESC: Natural gas line with markers on both side slightly angled through levee. Gas station located across canal on landward side.

landward side. FS Date: 3/18/2014

Photo 1 of 2: UCIP_FA_2016_39717_71705.jpg



View of marker visible on shoulder.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	11.24	Rating **	М	Issue No.		287 (cont)	
LM End	11.24	Issue Type +	En	Location *		CR	
Category	Suppleme	ental		GPS Lat	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.92566	2 °	38.925662 °	
пеш				-121.91430	3 °	-121.914303 °	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:39717 DS_ID:24876 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to contact owner to determine additional details

of crossing.

FIELD_STRUCT_DESC: Natural gas line with markers on both side slightly angled through levee. Gas station located across canal on

landward side. FS Date: 3/18/2014



Owner contact information listed on marker.

11.36 Rating ** М Issue No. LM Start 20 Issue Type + Location * CR 12.19 Ма LM End Earthen Levee GPS Latitude/Longitude Category Start End Crown Surface / Depressions / 38.927325° 38.938291 Item Rutting -121.913477° -121.907516 DWR ID DWR_RD0108_01_s _ 2016_20 Comment Code

C3 : Add appropriate gravel or road base. Grade and compact.

Inspector Comment

Photo 1 of 1: FA_2016_RD0108_203_20_20160913_00006.jpg



View of the crown of the levee looking upstream. Spring 2016.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	11.64	Rating **	С	Issue No.		28	
LM End	11.64	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		38.9309	80°	38.930980°	
пеш	item				89°	-121.911489°	
DWR ID	DWR ID DWR_RD0108_01_f _ 2015_28						
		Comn	nent Coc	de			
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	nent			

No Photos

LM Start	14.75	Rating **	М	Issue No.		21			
LM End	14.75	Issue Type +	Ma	Location *		Location *		CR	
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory			Start		End				
Item	Crown Surface / Depressions /			38.9698	11°	38.969811	٥		
item	Rutting			-121.926961 °		1° -121.926961			
DWR ID	DWR_RD0	108_01_s _ 201	6_21						
		Comn	nent Cod	de					
C2 : Repai	r depressi	ons or ruts in	the crow	n or slope.					
Inspector Comment									

No Photos

CR : Crown

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	14.94	Rating **	М	Issue No.		285
LM End	14.94	Issue Type +	En	Location *		CR
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.97160	7°	38.971607°
item				-121.92949	9°	-121.929499°
DWR ID	R ID					
Comment Code						

Inspector Comment

FS_ID:37623 DS_ID:17942 EP_NO: 3800

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to contact owner--marker missing on waterward

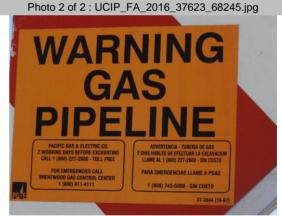
FIELD_STRUCT_DESC: 20-inch concrete encased gas line through levee, 3.0 feet below the crown. Crossing appears to be angled through levee (App. 3800-PG&E) Small rock revetment on the waterward slope. (unable to locate) Gas well approximately 1,000 feet from landward toe. FS Date: 6/10/2014

LM Start	14.94	Rating **	М	Issue No.	285 (cont)
LM End	14.94	Issue Type +	En	Location *	CR





Marker visible on landward side.



Contact information for gas line going through levee.

* Location + Issue Type Ma : Maintenance Deficiancy LS: Land Side N/A: Not Applicable A: Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob : Design & System Obsolescence CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	15.46	Rating **	М	Issue No.		22
LM End	15.74	Issue Type +	Ma	Location *		CR
Earthen Levee			GPS La	atitud	le/Longitude	
Category			Start		End	
Item	Crown Surface / Depressions /			38.9766	84°	38.979377°
пеш	Rutting			-121.9366	96°	-121.940526°
DWR ID DWR_RD0108_01_s _ 2016_22						
		Comn	nent Coo	le		
C2 : Repa	ir depressi	ons or ruts in	the crow	n or slope.		
		Inspecto	or Comm	ent		



View of the crown of the levee looking upstream. Spring 2016.

LM Start	18.24	Rating **	М	Issue No.		29
LM End	18.24	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory	9			Start		End
Item	Animal Co	ontrol		39.0057	66°	39.005766°
пеш	item				46°	-121.972346°
DWR ID DWR_RD0108_01_f _ 2015_29						
Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

LM Start	18.24	Rating **	М	Issue No.	29 (cont)
LM End	18.24	Issue Type +	Ma	Location *	WS

Photo 1 of 2: FA_2016_RD0108_203_29_20161004_00042.jpg



Updated view of a site with rodent activity. Fall 2016 inspection.

Photo 2 of 2: FA_2016_RD0108_203_29_20160913_00012.jpg



View of the animal hole on the waterward side of the levee looking upstream. Fall 2015.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	18.92	Rating **	М	Issue No.		6	
LM End	19.28	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachi	ments		39.0131	60°	39.017000°	
пеш					° 80	-121.985364°	
DWR ID DWR_RD0108_01_s _ 2012_6							
		Comn	nent Cod	de			
DT : Ditch							
		Inspecto	or Comm	nent			
Ditch is at the toe of the levee.							



View of the ditch at the toe of the levee on the landward side looking upstream. Spring 2016.

LM Start	19.14	Rating **	С	Issue No.		32
LM End	19.14	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS La	atitud	e/Longitude
Calegory	Salegory			Start		End
Item	Animal Co	ontrol		39.0155	22 °	39.015522°
пеш	em				18°	-121.983618°
DWR ID DWR_RD0108_01_f _ 2015_32						
Comment Code						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	19.15	Rating **	С	Issue No.		19	
LM End	19.15	Issue Type +	Ma	Location *		WS	
Category	Category Earthen Levee				atitud	e/Longitude	
Category						End	
Item	Animal Control			39.0156	34°	39.015634	0
пеш		-121.9837	57°	-121.983757	0		
DWR ID DWR_RD0108_01_s _ 2015_19							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

* Location		** Rating		+ Issue Type
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CD · Crown		II : Unaccontoble	AMM : Accortable but Maniter & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	19.27	Rating **	М	Issue No.		1		
LM End	19.35	Issue Type +	Ма	Location *		WS		
Category			GPS Latitude/Longitude					
Category				Start		End		
ltom	2015 USACE Erosion Survey,			39.0167	'27 °	39.017516°		
пеш	DRAFT				111°	-121.986374°		
DWR ID	DWR_RD0	108_01_s _ 201	6_1					
	Comment Code							
	Inspector Comment							

2011 - Toe scour at the bottom of a steep bank, large sections of the toe are sliding down. Erosion may be due to the upstream bend. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CBD_19-2_L]

Rating ** 19.41 С Issue No 25 LM Start Issue Type + Location * CR LM End 19.78 Ma Earthen Levee GPS Latitude/Longitude Category Start End Crown Surface / Depressions / 39.018352° 39.023306° Item Ruttina -121.986995 ° -121.988793 DWR_RD0108_01_s _ 2016_25 DWR ID **Comment Code**

C3 : Add appropriate gravel or road base. Grade and compact.

Inspector Comment

Rating ** Issue No. 20.38 С 30 LM Start Issue Type + Location * 20.43 CR Ma LM End Earthen Levee GPS Latitude/Longitude Category End Crown Surface / Depressions / 39.031526° 39.031477 Item Rutting -121.990258° -121.991089° DWR ID DWR_RD0108_01_s _ 2016_30 **Comment Code** C2: Repair depressions or ruts in the crown or slope. Inspector Comment

No Photos

No Photos

No Photos

** Rating
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable AW: Acceptable but Monitor & Maintain

** Rating
A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Basin Drain	Left	20.64	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	20.47	Rating **	С	Issue No.		31
LM End	20.55	Issue Type +	Ma	Location *		CR
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Crown Su	39.0317	'52 °	39.032763°		
пеш	Rutting			-121.991738°		-121.992438°
DWR ID DWR_RD0108_01_s _ 2016_31						
		Comn	nent Coc	de		
C2 : Repai	r depressi	ons or ruts in	the crow	n or slope.		
		Inspecto	or Comm	nent		

No Photos

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Reclamation District No. 0108 River Farms

Waterway		Unit Miles
Unit No. 02 Castle Properties	Right	0.28

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			М	
Date of Inspection	4/6/2016 - 4/6/2016		10/4/2016 - 10/4/2016	
DWR Inspector	Jai Lor		Oleg Yakimov	
Accompanied By			Gary Marler RD0108	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Castle Properties	Right	0.28	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.02	Rating **	U	Issue No.		6	
LM End	0.02	Issue Type +	Ма	Location *		WS	
Catagony	Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Control		38.79635	5°	38.796355°		
пеш				-121.72772	1 °	-121.727721 °	
DWR ID DWR_RD0108_02_f _ 2015_6							
Comment Code							

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Mound does not look fresh but seems to have come from the rodent hole.

LM Start	0.02	Rating **	U	Issue No.	6 (cont)
LM End	0.02	Issue Type +	Ma	Location *	WS

Photo 1 of 3: FA_2016_RD0108_590_6_20160913_00002.jpg



Mound next to rodent hole is more than 2 cubic feet of material.

Photo 2 of 3: FA_2016_RD0108_590_6_20160913_00003.jpg



Perspective view of the rodent hole on the waterward side of the levee looking upstream. Spring 2016.

LM Star	t 0.02	Rating **	U	Issue No.	6 (cont)
LM End	0.02	Issue Type +	Ma	Location *	WS





Another hole is on top of the crown. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Page 2 of 3

Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Castle Properties	Right	0.28	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.03	Rating **	М	Issue No.		1	
LM End	0.03	Issue Type +	Ma	Location *	CR		
Category	Earthen Levee			GPS Latitude/Longitude			
			Start		End		
Item	Crown Surface / Depressions /			38.796447°		38.796447°	
пеш	Rutting		-121.727487°		-121.727487°		
DWR ID	DWR_RD0108_02_f _ 2016_1						
Comment Code							
C3 : Add appropriate gravel or road base. Grade and compact.							
Inspector Comment							
Crown surface is damaged due to vehicular activity.							



Crown surface damaged due to intensive vehicle acceleration. Fall 2016 inspection.

LM Start	0.14	Rating **	A/W	Issue No.	8		
LM End	0.15	Issue Type +	Ob	Location *	CR		
Category	Earthen Levee			GPS Latitude/Longitude			
Category				Start		End	
Item	Cracking			38.797632°		38.797760°	
пеш				-121.726162 °		-121.726070°	
DWR ID	DWR_RD0108_02_f _ 2015_8						
Comment Code							

CR1: Monitor and have inspected by geotechnical engineer.

Inspector Comment

Cracks seems to have closed up after the rain, but it should be monitored.



View of the crack on the crown of the levee looking downstream. Fall 2015.

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 0108 River Farms

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Castle Properties	Right	0.28	10/04/2016 10/04/2016	Oleg Yakimov

LM Start	0.20	Rating **	С	Issue No.		9	
LM End	0.20	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Control			38.798280°		38.798280°	
пеш			-121.725565 °		65° -121.725565°		
DWR ID	DWR_RD0108_02_f _ 2015_9						
Comment Code							
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
Inspector Comment							

No Photos

LM Start	0.26	Rating **	С	Issue No.	3				
LM End	0.26	Issue Type +	En	Location *	WS				
Category	Earthen Levee			GPS Latitude/Longitude					
		Start		End					
Item	Encroachments			38.7989	71 °	38.798971	0		
				-121.7246	96°	-121.724696	0		
DWR ID	DWR_RD0108_02_s _ 2016_3								
Comment Code									
PR : Pruni	ngs								
Inspector Comment									

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement